

STRUCTURAL REINFORCEMENT USING COMPOSITE STRIPS

Abstract

A composite structural reinforcing strip is affixed to a structure to be reinforced (such as a bridge span, foundation pillar, or similar structure) by the use of several fasteners which extend through the strip and into the structure. The reinforcing strip preferably includes elongated continuous parallel fibers which have lengths extending along the length of the strip, and nondirectional fibers distributed transversely across the strip, with a polymer matrix affixing the parallel and nondirectional fibers. The strip may be placed on the structure to be reinforced, and may be attached thereon by actuating a common powder-actuated fastener gun to send fasteners through the strip and into the structure.